

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

Attorney Docket No.: 021031-000210US ^{PATENT} 1fw

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450



May 26, 2004

TOWNSEND and TOWNSEND and CREW LLP

By: Mark T. Davis

Mark T. Davis
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Robert Martienssen

Application No.: 10/606,502

Filed: June 26, 2003

For: METHODS AND COMPOSITIONS
FOR DETERMINING METHYLATION
PROFILES

Examiner: Not Yet Assigned

Art Unit: 1645

INFORMATION DISCLOSURE
STATEMENT UNDER 37 CFR §1.97 and
§1.98

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

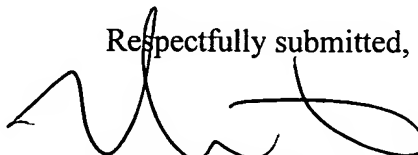
The references cited on attached form PTO/SB/08B are being called to the attention of the Examiner. Copies of the references are enclosed. It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that no fee is required for submission of this statement.

However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Matthew E. Hinsch', written over the typed name.

Matthew E. Hinsch
Reg. No. 47,651

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 415-576-0200
Fax: 415-576-0300
MEH:mtd
60219331 v1



Substitute for form 1449B/PT INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete if Known		
			Application Number	10/606,502	
			Filing Date	June 26, 2003	
			First Named Inventor	Martienssen, Robert	
			Art Unit	1645	
			Examiner Name	Not Yet Assigned	
Sheet	3	of		Attorney Docket Number	021031-000210US

U.S. PATENT DOCUMENTS+					
Examiner Initials*	Cite No. ¹	Document Number Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AA	US 5,405,760	04-11-1995	Raleigh et al.	
	AB	US-5,786,146	07-28-1998	Herman et al.	
	AC	US 5,871,917	02-16-1999	Duffy	
	AD	US-6,200,756 B1	03-13-2001	Herman et al.	
	AE	US 6,265,171 B1	07-24-2001	Herman et al.	
	AF	US-6,331,393 B1	12-18-2001	Laird et al.	
	AG	US-2002/0123053 A1	09-05-2002	Luo et al.	
	AH	US-2003/0129602 A1	07-10-2003	Huang	
	AI	US 2003/0148290 A1	08-07-2003	Cottrell	
	AJ	US 6,605,432 B1	08-12-2003	Huang	
	AK	US-2003/0165923 A1	09-04-2003	Li et al.	
	AL	US-2003/0180779 A1	09-25-2003	Lofton-Day et al.	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ²
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
	AM	WO	00/26401	A1	05-11-2000			<input type="checkbox"/>
	AN	WO	01/68807	A2	09-20-2001			<input type="checkbox"/>
	AO	WO	01/75172	A1	10-11-2001			<input type="checkbox"/>
	AP	WO	03/023065	A1	03-23-2003			<input type="checkbox"/>
	AQ	WO	03/025215	A1	09-13-2002			<input type="checkbox"/>
	AR	WO	03/027259	A2	04-03-2003			<input type="checkbox"/>
	AS	WO	03/066895	A2	08-14-2003			<input type="checkbox"/>
	AT	WO	03/076666	A1	09-18-2003			<input type="checkbox"/>

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	AU	ADORJAN, Peter et al.; "Tumour class prediction and discovery by microarray-based DNA methylation analysis"; <u>Nucleic Acids Research</u> , 2002, Vol. 30, No. 5 e21, 9 pages.	
	AV	BURMAN Robert W. et al.; "Hypomethylation of an Expanded FMR1 Allele Is Not Associated with a Global DNA Methylation Defect"; <u>Am. J. Hum. Genet.</u> , 1999, Vol. 65, pp. 1375-1386.	
	AW	CALDAS, Carlos et al.; "Frequent somatic mutations and homozygous deletions of the p16 (MTS1) gene in pancreatic adenocarcinoma"; <u>Nature Genetics</u> , 1994, Vol. 8, pp. 27-32.	
	AX	CRAIG, B.A. et al.; "Designing Microarrays"; <u>Applied Statistics in Agriculture</u> , pp. 159-164.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete if Known		
			Application Number	10/606,502	
			Filing Date	June 26, 2003	
			First Named Inventor	Martienssen, Robert	
			Art Unit	1645	
			Examiner Name	Not Yet Assigned	
Sheet	4	of	Attorney Docket Number		021031-000210US

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)		
	AY		EADS, Cindy A. et al.; "MethyLight: a high-throughput assay to measure DNA methylation"; <u>Nucleic Acids Research</u> , 2000, Vol. 28, No. 8, e32, 8 pages.			
	AZ		FRIGOLA, Jordi et al.; "Methylome profiling of cancer cells by amplification of inter-methylated sites (AIMS)"; <u>Nucleic Acids Research</u> , 2002, Vol. 30, No. 7, e28, 7 pages.			
	BA		GENC, B. et al.; "Identification of disease associated genes and tumour class prediction by genome wide microarray-based DNA methylation scanning"; <u>The American Journal of Human Genetics</u> , 2001, Vol. 69, No. 4, 1 page abstract.			
	BB		HATADA, Izuho et al.; "A microarray-based method for detecting methylated loci"; <u>J. Hum. Genet.</u> , 2002, Vol. 47, pp. 448-451.			
	BC		HERMAN, James G. et al.; "Methylation-specific PCR: A novel PCR assay for methylation status of CpG islands"; <u>Proc. Natl. Acad. Sci.</u> , 1996, Vol. 93, pp. 9821-9826.			
	BD		HUANG, Tim Hui-Ming et al.; "Methylation profiling of CpG islands in human breast cancer cells"; <u>Human Molecular Genetics</u> , 1999, Vol. 8, No. 3, pp. 459-470.			
	BE		McCLELLAND, Michael et al.; "Effect of site-specific modification on restriction endonucleases and DNA modification methyltransferases"; <u>Nucleic Acids Research</u> , 1994, Vol. 22, No. 17, pp. 3640-3659.			
	BF		"McrBC - M0272 - NEB Restriction Endonucleases; http://www.neb.com/neb/products/res_enzymes/272.html , 3 pages.			
	BG		"McrBC"; Technical Bulletin, 2001, <u>New England Biolabs, Inc.</u> , 2 pages.			
	BH		OKAMOTO, Keisei et al.; "Epigenetic changes at the insulin-like growth factor II/H19 locus in developing kidney is an early event in Wilms tumorigenesis"; <u>Proc. Natl. Acad. Sci.</u> , 1997, Vol. 94, pp. 5367-5371.			
	BI		SCHUTTE, Mieke et al.; "Abrogation of the Rb/p16 Tumor-suppressive Pathway in Virtually All Pancreatic Carcinomas"; <u>Cancer Research</u> , 1997, Vol. 57, pp. 3126-3130.			
	BJ		STEIGERWALD, Sabine D. et al.; "Ligation-mediated PCR improves the sensitivity of methylation analysis by restriction enzymes and detection of specific DNA strand breaks"; <u>Nucleic Acids Research</u> , 1990, Vol. 18, No. 6, pp. 1435-1439.			
	BK		TOMPA, Rachel et al.; "Genome-Wide Profiling of DNA Methylation Reveals Transposon Targets of CHROMOMETHYLASE3"; <u>Current Biology</u> , 2002, Vol. 12, pp. 65-68.			
	BL		TOYOTA, Minoru et al.; "Identification of Differentially Methylated Sequences in Colorectal Cancer by Methylated CpG Island Amplification"; <u>Cancer Research</u> , 1999, Vol. 59, pp. 2307-2312.			
	BM		WANG, C.H. et al.; "Autism DNA methylation profiling using CpG microarrays"; <u>The American Journal of Human Genetics</u> , 2001, Vol. 69, No. 4, 1 page abstract.			
	BN		WEI, Susan H. et al.; "Methylation Microarray Analysis of Late-Stage Ovarian Carcinomas Distinguishes Progression-free Survival in Patients and Identifies Candidate Epigenetic Markers"; <u>Clinical Cancer Research</u> , 2002, Vol. 8, pp. 2246-2252.			

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.